

AMENDMENTS TO THE CLAIMS

CLAIM 1 (CURRENTLY AMENDED): A bicycle hub dynamo comprising:
a hub spindle adapted to be mounted to a frame of the bicycle;
a hub body disposed around the hub spindle, wherein the hub body has a first side and a second side, and wherein the hub body has a pair of axially spaced hub flanges;
a plurality of bearings disposed between the hub body and the hub spindle for rotatably supporting the hub body relative to the hub spindle;
a generating mechanism disposed between the hub body and the hub spindle, wherein the generating mechanism generates electricity in response to rotation of the hub body relative to the hub spindle; ~~and~~
a freewheel disposed on the first side of the hub body, wherein the freewheel is adapted to mount a plurality of sprockets, wherein the freewheel is attached to a cover member, and wherein the cover member covers an opening in the hub that has a diameter sufficient to allow removal of the generating mechanism therethrough; and
a coupling structure disposed in a force transmission path between the cover member and the hub body to inhibit relative rotation between the cover member and the hub body.

CLAIM 2 (PREVIOUSLY PRESENTED): The dynamo according to claim 1 further comprising a brake device mounting member disposed on the second side of the hub body.

CLAIM 3 (ORIGINAL): The dynamo according to claim 2 further comprising a brake disk coupled to the brake device mounting member.

CLAIM 4 (ORIGINAL): The dynamo according to claim 2 further comprising a brake drum coupled to the brake device mounting member.

CLAIM 5 (ORIGINAL): The dynamo according to claim 2 further comprising a roller brake coupled to the brake device mounting member.

CLAIMS 6-8 (CANCELED).

CLAIM 9 (ORIGINAL): The dynamo according to claim 8 1 wherein the hub body has a threaded portion that engages a threaded portion of the cover member.

CLAIM 10 (ORIGINAL): The dynamo according to claim 9 wherein the hub body has a female threaded portion that engages a male threaded portion of the cover member.

CLAIM 11 (ORIGINAL): The dynamo according to claim 10 wherein the female threaded portion is a right-hand threaded portion.

CLAIM 12 (CURRENTLY AMENDED): A bicycle hub dynamo comprising:
a hub spindle adapted to be mounted to a frame of the bicycle;
a hub body disposed around the hub spindle, wherein the hub body has a first side and a second side, and wherein the hub body has a pair of axially spaced hub flanges;
a plurality of bearings disposed between the hub body and the hub spindle for rotatably supporting the hub body relative to the hub spindle;
a generating mechanism disposed between the hub body and the hub spindle, wherein the generating mechanism generates electricity in response to rotation of the hub body relative to the hub spindle;
a freewheel disposed on the first side of the hub body, wherein the freewheel is adapted to mount a plurality of sprockets,
wherein the second side of the hub body defines an opening having a diameter sufficient to allow removal of the generating mechanism ~~therethrough, and further comprising therethrough;~~
a cover member disposed at the second side of the hub body; and
a coupling structure disposed in a force transmission path between the cover member and the hub body to inhibit relative rotation between the cover member and the hub body.

CLAIM 13 (ORIGINAL): The dynamo according to claim 12 further comprising a brake device mounting member disposed on the cover member.

CLAIM 14 (ORIGINAL): The dynamo according to claim 13 wherein the hub body has a threaded portion that engages a threaded portion of the cover member.

CLAIM 15 (ORIGINAL): The dynamo according to claim 14 wherein the hub body has a female threaded portion that engages a male threaded portion of the cover member.

CLAIM 16 (ORIGINAL): The dynamo according to claim 15 wherein the female threaded portion is a right-hand threaded portion.

CLAIM 17 (PREVIOUSLY PRESENTED): A bicycle hub dynamo comprising:
a hub spindle adapted to be mounted to a frame of the bicycle;
a hub body disposed around the hub spindle, wherein the hub body has a first side and a second side, and wherein the hub body has a pair of axially spaced hub flanges;
a plurality of bearings disposed between the hub body and the hub spindle for rotatably supporting the hub body relative to the hub spindle;
a generating mechanism disposed between the hub body and the hub spindle, wherein the generating mechanism generates electricity in response to rotation of the hub body relative to the hub spindle;
a freewheel disposed on the first side of the hub body, wherein the freewheel is adapted to mount a plurality of sprockets;
wherein the hub body comprises:
a first cylindrical portion that houses the generating mechanism; and
a second cylindrical portion having a smaller diameter than the first cylindrical portion.

CLAIM 18 (ORIGINAL): The dynamo according to claim 17 further comprising a brake device mounting member disposed on the first cylindrical portion.

CLAIM 19 (ORIGINAL): The dynamo according to claim 1 wherein the generating mechanism comprises:
a magnet disposed on an inner peripheral surface of the hub body; and
a stator unit disposed radially inwardly of the magnet.

CLAIM 20 (PREVIOUSLY PRESENTED): A bicycle hub dynamo comprising:
a hub spindle adapted to be mounted to a frame of the bicycle;

a hub body disposed around the hub spindle, wherein the hub body has a first side and a second side, and wherein the hub body has a pair of axially spaced hub flanges;

a plurality of bearings disposed between the hub body and the hub spindle for rotatably supporting the hub body relative to the hub spindle;

a freewheel disposed on the first side of the hub body, wherein the freewheel is adapted to mount a plurality of sprockets;

a generating mechanism disposed between the hub body and the hub spindle, wherein the generating mechanism generates electricity in response to rotation of the hub body relative to the hub spindle, and wherein the generating mechanism comprises:

a magnet disposed on an inner peripheral surface of the hub body; and

a stator unit disposed radially inwardly of the magnet, wherein the stator unit comprises:

a coil disposed radially inwardly of the magnet;

a yoke surrounding the coil, wherein the magnet rotates relative to the yoke around an axis, wherein the yoke comprises:

a plurality of laminated first yoke arms disposed on a first axial side of the coil, each first yoke arm having a first yoke arm radially outer portion and a first yoke arm radially inner portion, and each first yoke arm comprising a plurality of laminated first plate-shaped pieces;

a plurality of laminated second yoke arms disposed on a second axial side of the coil, each second yoke arm having a second yoke arm radially outer portion and a second yoke arm radially inner portion, and each second yoke arm comprising a plurality of laminated second plate-shaped pieces;

wherein each first yoke arm radially inner portion faces a corresponding second yoke arm radially inner portion in the axial direction;

wherein the plurality of first yoke arm radially outer portions extend axially toward the second axial side of the coil;

wherein the plurality of second yoke arm radially outer portions extend axially toward the first axial side of the coil; and

wherein the plurality of first yoke arm radially outer portions are interleaved with the plurality of second yoke arm radially outer portions in a circumferential direction.